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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/535,573	03/27/00	FOSTER R	M-4540-1C US

TM02/0308
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EXAMINER	
NGUYEN, C	
ART UNIT	**PAPER NUMBER**
2165	7

DATE MAILED: 03/08/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/535,573	Robert A. Foster
Examiner	**Group Art Unit**
Cuong H. Nguyen	2165

☒ Responsive to communication(s) filed on *Sep 11, 2000*

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *1-86* is/are pending in the applicat

Of the above, claim(s) *1-46* is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *47-86* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *4*

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

DETAILED ACTION

1. This Office Action is the answer to the communication received on 09/11/2000.

2. Claims **1-86** are pending in this application; claims 1-46 were canceled.

3. The following rejections are based on the examiner's broadest reasonable interpretation of the claims; *In re* ***Pearson***, 181 USPQ 641 (CCPA 1974).

Claim Rejections - 35 USC § 101

4. 35 U.S.C.§101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims **47-67** are rejected under 35 U.S.C.§101 because they comprise an essential step of "creating a database"; this subject matter is non-statutory since this step comprises of a functional descriptive material (data structure per se) (see USPTO: 35 USC 101 Computer-Implemented Invention Guideline)(a definition for database is a file composed of records, each containing fields together with a set of operations for searching, sorting, recombining/linking, and other related functions).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A. Claims **47, 68** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The preamble of these claims should state "A method/data processing system for measuring cost of processing financial transactions..." instead of "A method/data processing system for pricing transactions..." because the claimed subject matter is too broad. There is no preamble in the introductory part of these claims for intended uses, capabilities, and structures which will result upon the performance of that method/system (e.g. positive structural limitations); the applicant seems to believe that his invention (on which a claim in proper structural form has been allowed) is particularly pointed out and distinctly claimed within the meaning of section 112 because of the presence of these statements. He is apparently aware of the necessity for limiting his claim as he thinks he has done. In this sense, it fails to comply with section 112, 2nd para., in failing distinctly to claim what appellant insists is his actual invention. There is no positive recitation of any structural cooperation among the element

listed, this rejection as in fact based on the ground that the claim is incomplete, and therefore, indefinite and in this way does not conform to the requirement of 35 USC 112.

B. Claims **48-67**, and **69-86** are rejected under 35 U.S.C. 112, second paragraph, because they are dependent on rejected base claims 47, and 68 in that order.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C.§103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims **47-86** are rejected under 35 U.S.C. §103(a) are rejected under 35 U.S.C. §103(a) as being unpatentable over Claus et al. (US Pat. 5,559,313), in view of Burt et al. (US Pat. 5,682,482), further in view of Doktor (US Pat. 5,604,899), in view of Rothstein (US Pat. 5,636,117), in view of Claus et al. (US Pat. 5,559,313), and further in view of Moore et al. (US Pat. 5,630,127), further in view of the Official Notice.

A. Burt et al. disclose a support method/system with related function including financial transaction functions (e.g. see '**482** the abstract), comprising steps/means:

- creating a transaction instance corresponding to a financial transaction (e.g. see '**482**, the abstract, col.6 lines 1-14, and col.21 lines 42-59)(for claims **47**, **68**);

Burt et al. do not expressly show that: service instances linking to transaction instances; creating a billing service instance linked to a service instance with relation instance (for claim **47**), and an entity instance can be an account instance (for claims **64**, **85**).

However, Doktor (US Pat. 5,604,899) obviously suggests these above steps (e.g. see '**899** claims 1, 6-7, Figs. 4A-B, 6B, 10; or e.g.'**482** Fig.5; col.30 lines 7-16). Doktor also suggests a step of creating a relation instance linking a transaction instance to an account instance (e.g. see '**899** Figs. 4B, 6A, and 6B).

Rothstein ('**117**) obviously suggests that a market segment instant is an entity instant (for claim **55**)(e.g. see '**117** col.2 lines 8-10, and lines 54-57, col.3 lines 9-12).

Moore et al. ('**127**) obviously suggests a step of storing a transaction instance/an account instance/a client instance, a production service instance, a settlement service instance, and a

billing service instance in an entity instance table, and they are inherently "link"/"relate" together as a functional data structure (e.g. see '127 Fig.4, and col.10 lines 25-55)(claims **48-51, 58, 69-75, 78, 83**).

The examiner submits that a price table instance could be defined as a cost table instance (claim **60, 80**), and said price is a cost; or a price table instance can be defined as a table instance, and said price is a fee (claims **61, 81**), whether they are expressed in different formats. Doktor ('**899**) obviously suggests a step of creating a cost table instance related to a fee table instance by a relation instance (claims **62, 82**); and an entity instance can be an account instance (e.g. see '**899** col.30 lines 7-16).

The Official Notice is taken here that these following definitions suggested in claims are well-known:

- an entity instance could be defined as a client instance (claim **64, 66, 85**);

- an entity instance could be defined as a market segment instance (claim **55**).

The examiner submits that all claimed limitations are inherent/notoriously well-known as instances for pricing transactions always "link" to related objects in computer-related applications, because these claimed limitations are very broad that

they are easily recognized by artisan in the art to be implemented in a computer system via software programs; cited prior art's limitations are not necessary spelled-out exactly claimed languages. It is reasonable that various modifications and variations of the described method and system of the cited prior art would be apparent to those skilled in the art without departing from the scope and spirit of the invention. Although cited prior art disclosures have been described in connection with specific preferred embodiments, it should be understood that their subject matter should not be unduly limited to such specific embodiments.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to implement Doktor 's method/apparatus in a specific application of Burt et al. in financial transaction because these information are readily available at that time, and they would be an efficient organization in storing information in order to minimize retrieval time.

B. Ref. to claims 76-77/56-57: In addition, Doktor obviously suggests of storing/retrieving relation instances in relation instance table (e.g. see '899 Fig. 9.1 and claim 5); and creating a second entity instance related to first entity instance (e.g. see '899 Fig. 4A).

C. Re. to claims 79/59, 83/63, 65/84:

The rationales for rejection of claims 47/68 are incorporated herein.

Claus et al. ('313) obviously suggests a means for creating a price table instance related to a transaction instance; the examiner submits that the phrase "wherein said price table instance contains a price for said billing service instance" is obviously interpreting above under-lined key-words meaning (e.g. see '313 Fig.6).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement Claus et al. idea, and Doktor 's method/apparatus in a specific application of Burt et al. in financial transaction because these information are readily available at that time, and they would be an efficient organization in storing information in order to minimize retrieval time.

D. Re. to claims 47-67: They are also rejected under 35 U.S.C.§103(a) because they are steps that using exactly means claimed in claims 68-86 with similar rationale and references.

Conclusion

7. Claims **47-86** are rejected.

8. The examiner submits that the reasons for rejection are obvious (v.s. cited prior arts) with claim language. Applicant is suggested to indicate **in the claims how** the claims distinguish from the combining of cited prior arts. An instance, as defined, can be

any object in object-oriented programming in relation to the class to which it belongs; a definition for instance variable: a variable associated with an instance of a class (an object), if a class defines a certain variable, each instance of the class has its own copy of that variable. Hence, there is nothing novel in defining/creating again different instances that linking together in a data structure (the definition is already established for an obvious/inherent use of "instance" in cited prior art).

9. Remarks: The following are US Patent case-law rulings applying in this examination.

A. *In re* ***Heck***, 216 USPQ 1038 (CA FC 1983), the court ruled:

Similarly relative terms in claims are given broadest reasonable interpretation during patent application's prosecution.

B. *Ex parte* ***Rubin***, 5 USPQ2d 1461 (BdPatApp&Int 1987), the court said:

Knowledge in the art may have advanced such that results considered incredible are no longer per se incredible.

C. *In re* ***Susi***, 169 USPQ 423 (CCPA 1971), the court said: Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or non-preferred embodiments.

D. *In re* ***Heck***, 216 USPQ 1038 (Fed. Cir. 1983), the court said: "The use of patents as references is not limited to what the patentees

describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain."

E. In re **Hiniker Co.**, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998), the court ruled: "The name of the game is the claim."

F. Although operational characteristics of a system may be apparent from the specification, we will not read such characteristics into the claims when they cannot be clearly connected to the structure recited in the claims. See **In re Self**, 671 F.2d 1344, 1348, 213 USPQ 1, 5 (CCPA 1982). When given their broadest reasonable interpretation, the claims on examination sweep in the prior art, and the prior art would have directed an artisan of ordinary skill to make the combination cited by the examiner. See also **Giles Sutherland Rich**, Extend of Protection and Interpretation of Claims -- American Perspectives, 21 Int'l Rev. Indus. Prop. & Copyright L. 497, 499 (1990); ("The US is strictly an examination country and the main purpose of the examination, to which every application is subjected, is to try to make sure that what each claim defines is patentable. To coin a phrase, the name of the game is the claim").

G. A statement of purpose or intended use in the preamble of a claim must be considered if the language of a preamble is necessary to give meaning to the claim" **Diversitech Corp. v. Century Steps,**

Inc., 7 USPQ2d 1315 (Fed. Cir. 1988); In re **Stencel**, 4 USPQ2d 1071(Fed. Cir. 1987).

H. In re ***Heck***, 216 USPQ 1038 (CA FC 1983), the court said:

Similarly relative terms in claims are given broadest reasonable interpretation during patent application's prosecution.

I. Ex parte ***Rubin***, 5 USPQ2d 1461 (BdPatApp&Int 1987), the court said:

Knowledge in the art may have advanced such that results considered incredible are no longer per se incredible.

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K. In re ***Heck***, 216 USPQ 1038 (Fed. Cir. 1983), the court said: "The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain."

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connected to the structure recited in the claims. See **In re Self,** 671 F.2d 1344, 1348, 213 USPQ 1, 5 (CCPA 1982). When given their broadest reasonable interpretation, the claims on examination sweep in the prior art, and the prior art would have directed an artisan of ordinary skill to make the combination cited by the examiner. See also **Giles Sutherland Rich,** Extend of Protection and Interpretation of Claims -- American Perspectives, 21 Int'l Rev. Indus. Prop. & Copyright L. 497, 499 (1990); ("The US is strictly an examination country and the main purpose of the examination, to which every application is subjected, is to try to make sure that what each claim defines is patentable. To coin a phrase, the name of the game is the claim").

N. A statement of purpose or intended use in the preamble of a claim must be considered if the language of a preamble is necessary to give meaning to the claim" **Diversitech Corp. v. Century Steps, Inc.,** 7 USPQ2d 1315 (Fed. Cir. 1988); In re **Stencel,** 4 USPQ2d 1071(Fed. Cir. 1987).

10. The cited references are considered pertinent to applicant's disclosure:

- Howcroft, "Contemporary Issues in UK Bank Delivery Systems", International Journal of Service Industry Management, Vol.3, No.1, pp.39-56, ISBN 0956-4233, 1992.

- "Teller Fees Translate To Torrid ATM Activity", Debit Card News, Vol.1, No.4, pg. 1+, Aug. 03 1995.

- "Banks Freeze Debit Fees To Shorten Teller Lines", Debit Card News, Vol.1, No.1, pg.1+, June 15 1995.

- "The Smart Card's Chief Advocate", Credit Card Management, Vol.10, No.1, pg. 26+, ISBN: 0896-9329, April 1997.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Cuong H. Nguyen, whose telephone number is (703)305-4553. The examiner can normally be reached on Mon.-Fri. from 7AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent A. Millin, can be reached on (703)308-1065.

Any response to this action should be mailed to:

Amendments

Commissioner of Patents and Trademarks

c/o Technology Center 2100

Washington, D.C. 20231

or faxed to: (703) 308-9051, (for formal communications)

Or: (703) 305-0040 (for informal or draft communications)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)305-3900.

Cuong Nguyen

Cuong H. Nguyen
Patent Examiner
Mar. 07, 2001